RTP APPENDIX D

Regional Transportation Plan Details

SB 45 Impacts

Senate Bill 45 (Chapter 622 Statutes 1997, Kopp) had significant impacts on the regional transportation planning and programming process. Some of these impacts include:

- Further empowering regional transportation planning agencies to take a more active role in the programming of projects;
- Significantly modified the State Transportation Improvement Program (STIP) and Regional Transportation Improvement Program (RTIP) cycle, program components, and expenditure priorities;
- After "Off the top" allocations such as for the SHOPP, SB 45 mandates 25% of the SHA to ITIP and 75% to fund the RTIPs;
- Simplified funding programs;
- Encouraged more decision-making through partnerships among stakeholders;
- Introduced greater regional agency fiscal accountability into the STIP process;
- Significantly changed the regional planning / State partnership relationships, and;
- Required the development and implementation of Transportation System Performance Measures.

TEA 21 Impacts

The federal Transportation Equity Act for the 21st Century (TEA 21) clearly supports many of the transportation planning innovations initiated by ISTEA (Intermodal Surface Transportation Efficiency Act of 1991). Initiated by ISTEA, TEA 21 had the following impacts on the regional transportation planning process:

- Delegated major planning decisions to the states and MPOs**;**
- Reinforced the goals of the federal Clean Air Act;
- Expanded (in both funding and scope) the Congestion Mitigation/Air Quality Improvements (CMAQ) Program;
- Greatly increased focus on increasing the efficiency of the existing transportation system;
- Added additional funding for corridor planning;
- Identified the need to address international border interface issues;
- Continued the emphasis on freight movement;
- Consolidated previous 15 ISTEA planning factors into seven broad planning areas;
- Reinforced federal emphasis on tribal government participation;
- Provided special funding for identified projects;
- Integrated former MIS studies in the planning and NEPA process;
- Initiated job access programs;
- Mainstreams ITS concepts into the traditional planning and programming process, and;
- Encourages ITS deployment and system integration.

Regional Transportation Planning Process

The Transportation Planning Process has a multitude of functions. The following is a brief list showing examples of some of the purposes of the regional transportation planning process:

- Establish regional transportation goals and objectives;
- Identify and develop transportation improvements that meet the region's: mobility, accessibility, livability, and sustainability needs;
- Evaluate transportation performance and identify future needs;
- Contribute to the economic health of the region;
- Preserve and enhance the environmental quality of the region;
- Identify transportation safety and operational issues;
- Identify interregional transportation issues for partnership resolution with Caltrans and others;
- Integrate the regional transportation systems to form a seamless statewide system;
- Promote equity for all system users;
- Promote community vitality;
- Meet state and federal requirements as a basis for project development, and;
- Encourage use of best practices.

Coordination/Consultation

The current Regional Transportation network can influence each individual in a region. A change in the network may have profound implications for individuals, groups, decision makers, users, residents, the environment and air quality. To assure a smooth transition from planning, programming and project development, federal statutes require and state statutes support the concept of open and active involvement by all interested stakeholders. The following specific groups and agencies should be consulted in the development of the regional transportation plan.

- Local planning agencies (including local city/county government, local air districts, and certified coastal planning agencies);
- Regional planning agencies (including Congestion Management Agencies, agencies in adjacent regions and within the same air basin);
- State agencies (including Caltrans District offices HQ's regional and system planning units and the California Highway Patrol);
- Federal agencies (including FWHA, EPA and FTA);
- Environmental, energy, resource and permit agencies;
- Public and private transit operators / paratransit;
- Regional airport operators;
- Port managers/Port Authorities;
- Trucking industry;
- Local and regional rail system providers;
- High speed rail agencies, providers and planners;
- Rail freight operators and advisory councils;
- Native American tribal governments and communities;
- Coastal Commission;
- Energy Commission;
- Office of Planning and Research;
- California Environmental Protection Agency;
- California Resources Agency;
- State Water Board;
- Regional Water Quality Control Board;
- Bay Conservation and Development Commission (Bay Area);
- National Park Service;
- National Marine and Fishery Service;
- Regional Waste Board;
- Federal Fish and Wildlife Service;
- Private sector carpools / rideshare coordinators;
- Emergency providers;
- U.S. Army Corps of Engineers;
- State Department of Fish and Game;
- Air Resources Board;
- Regional Air Quality Management District
- Community interest groups (i.e. environmental, bicycle, senior etc)and;

- The California Alliance for Advanced transportation Systems.

Performance Measurement

The RTPA should consider the following in applying performance measurement to the RTP:

- Performance measurement involves examining the performance of the existing system as well as forecasting the performance of the future (planned) system.

- By examining performance of the existing system over time, the RTPA can monitor trends and identify regional transportation needs that may be considered in the RTP.

- Performance measurement has the potential to clarify the link between transportation decisions and eventual outcomes, thereby improving discussion of planning options and communication with the public. This may also help determine which improvements provide the best means for maximizing the system's performance within cost and other constraints.

- Forecasting the future system performance in the context of the RTP should:

  - Assist the RTPA in comparing outcomes of different alternative strategies in developing the plan.

  - Facilitate comparisons across modes and among strategies focused on different modes.

  - Facilitate assessment of priorities in the action element of the RTP which would link to plan implementation through the RTIP and the ITIP. This will further assist Caltrans to integrate interregional transportation objectives and decisions with regional objectives and decisions.

Policy Considerations

The Policy Element is required for all RTPs. The following are issues that should be considered in establishing the Policy Element:

- Land use issues such as regional population growth, projected areas of development, and demographic changes;

- Economic factors such as public/private partnerships, development of tourism, decline of agriculture, and major shifts in the economy;

- Environmental issues such as air quality, energy, and resource protection, water quality, solid and hazardous waste, climate change, ozone depletion, habitat and open space loss, resource consumption;
- New transportation technologies and operational improvements to enhance the efficiency of the regional transportation system;
- Regional system performance objectives;
- Statewide priorities and issues identified in the California Transportation Plan, Interregional Transportation Strategic Plan, other State plans and the California Transportation Planning Directions Statement ;
- Federal and State direction such as jobs access/welfare to work strategies; and
- Public and industry involvement and consensus development.

Assumptions

Assumptions are defined in the Action Element. They form the basis upon which the goals, policies and objectives are based. While there is not a specific number of assumptions to be defined, each RTP should address at least the following in terms of assumptions:

- Demographic projections;
- Land use forecasts;
- Air quality attainment status, consistency of planning assumptions and models that assist in subsequent conformity determinations;
- Performance conditions such as levels of service, delay, or variance in travel time;
- Capital operations and maintenance costs (as appropriate);
- Cost of alternatives;
- Timeframe (short and long - term);
- Environmental resources of concern;
- Methodology.

Alternatives

Each region has its own unique transportation needs and issues to address. The Action Element is the section that clearly and specifically identifies those potential needs and issues. The following are some of the general issues that should be examined for each alternative:

- Safety and operational issues;
- Maintenance of the existing regional transportation system;
- Interregional travel demand;
- Capacity issues and special events;
- Specialized needs (regionally determined);
- Goods movement;
- Land use impact;
- Corridor needs;
- Connectivity and access concerns;
- Demand management strategies / parking management;
- Environmental and energy impact;
- Air quality impacts;
- Emergency preparedness planning, emergency response, incident detection;
- Community and regional concerns;
- Cross jurisdictional communication network needs;
- Planning, surveillance, and performance data;
- Ground access to airports and airport system capacity;
- Regional Intelligent Transportation System architecture and standards requirements;
- Resource sharing and partnership opportunities.

Regional Transportation Plan Analysis

Based upon identified alternatives, assumptions and policies, a vigorous analysis is undertaken and identified in the Action Element. This analysis provides the rationale for those projects recommended for programming in the RTP. While each RTPA determines factors of their analysis, the RTP analysis should consider at least the following:

- Local General Plans, specific plans and master plans;
- Previous regional plans;
- State plans, specifically for state wide issues, priorities and emerging programs;
- Airport Land Use Plans or Comprehensive Land Use Plans;
- Land use and community issues including livability and sustainability;
- Environmental impacts (e.g. wetlands, cultural resources, energy consumption, sensitive species) and potential mitigation measures;
- Economic development;
- Air quality assessments, conformity with the SIP, in federal nonattainment and maintenance areas;
- California Clean Air Act transportation performance measures, in state nonattainment and maintenance areas;
- Local Air Quality Plans;
- Congestion Management Programs;
- Transportation Demand Management Strategies;
- Federal legislation (e.g. TEA 21 planning factors), and federal programs (e.g. Welfare to Work);
- State legislation such as SB 45 (Chapter 622 Statutes 1977) and CEQA regulations;
- Specialized transportation needs;
- Application of new technologies such as Intelligent Transportation Systems (ITS);
- Regional aviation system plans, airport master plans;

- Public/private partnerships and/or outsourcing opportunities;
- Expenditure priorities established by state legislation;
- Regional / Statewide system (ITS) architecture and standards;
- Caltrans System Planning products such as: Transportation Concept Reports/ Route Concept Plans, Corridor Studies;
- Caltrans Transportation System Development Program;
- Caltrans District System Management Plans;
- The California Transportation Investment Strategy;
- Caltrans Interregional Transportation Strategic Plan;
- Unmet transit needs;
- Bikeway plans;
- Regional system performance outcomes and related criteria such as:
  - Safety and Security
  - Mobility and Accessibility
  - Reliability
  - Cost effectiveness
  - Economic well being
  - Environmental quality
  - Customer satisfaction
  - Sustainability
  - Equity
- Analytical requirements of the former MIS process; and
- Other sources and issues as appropriate (e.g. TDM options such as ridesharing, carpooling, park and ride lots, travel substitution strategies, etc.).

Action Element Overview

The following is a brief description of the topics within the Action Element Overview that should be addressed in the regional transportation plan, as appropriate for the region.

- Long-Range Plan A description of the long-range system-wide transportation plan and the major components of that Plan;
- Corridor Preservation A list of the corridors identified for preservation;
- Previous Plan Accomplishments A description of the progress in implementing the previously adopted RTP(s);
- Implementation Recommendations for changes and identification of responsibilities for plan project and demand management measure implementation. The Action Element should form the basis for development of the RTIP and shall (Government Code 65080(b)(1)) conform to projected revenues and costs in the Financial Element;
- Air Quality A discussion of impacts of proposed actions on the timely attainment of federal and state air quality standards;
- Land Use / Airport Land Use Land use recommendations/options for addressing transportation concerns including transportation corridor preservation issues and a discussion of whether transportation strategies and land use policies and trends are consistent. If appropriate, a discussion of the status of the Airport Land Use Commissions;
- Environmental Discussion of significant environmental impacts and potential mitigation;
- New Technologies A discussion of Intelligent Transportation Systems (ITS) which indicates how the application of advanced electronics, information technology, and telecommunications to transportation infrastructure and services is intended to reduce congestion, improve safety, enhance mode choice, and stimulate economic growth. Examples of ITS technologies include:
    - Advanced Traveler Information Systems that notify travelers of routes and traffic conditions;
    - Advanced Transportation Management Systems that improve traffic flow and ease congestion;
    - Public Transportation Systems that offer information about shared ride opportunities; Commercial Vehicle Operations that improve the movement of goods and services;

- ♦ Electronic Payment Systems that automate toll collection or transit fare payment; and Advanced Vehicle Control Systems that assist drivers in the operation of motor vehicles.

- Emergency Preparedness Planning A discussion of the regional planning process for emergency preparedness and emergency response for the regional transportation system including identification of emergency corridors and reliever routes;

- Institutional and Legislative Actions A discussion of the institutional and legislative actions necessary to implement the system-wide plan;

- Evaluation A discussion of the procedures and measures for periodically evaluating the effectiveness of the recommended actions and programs in meeting regional transportation goals.

Implementation Strategies

The following is a list of implementation strategies and issues that should be addressed in the regional transportation plan, as appropriate to the region.

A. Transportation Demand Management (TDM) Strategies Section, should address:

- How the regions will use TDM strategies to achieve mobility and air quality objectives;

- Examples of TDM strategies (ride sharing programs, construction of bike lanes, etc.);

- A priority list of TDM approaches to be used;

- Travel substitution i.e. telecommuting, flex – time schedules, etc.

B. The Air Quality (in nonattainment and maintenance areas) section should address:

- RTP strategies to support the motor vehicle emissions reduction goals of the region's adopted air quality plans;

- Air quality impacts in the context of the entire nonattainment area even if it extends beyond the RTPA boundary;

- California Clean Air Act transportation performance standards;

- Implementation of air quality plan transportation and mobile source measures;

- Implementation schedule for Transportation Control Measures in State and Federal Air Quality Plans.

C. The Transportation System Management (TSM) section should address:

- Strategies for implementation;
- Integration of regional projects with Caltrans System Management Plans;
- Integration of regional projects from other sources;
- Per CTC policy (adopted August 1999) the regions must adopt a TSM strategy for addressing systems wide congestion in order for Caltrans to fund TSM improvements from the SHOPP.

D. The Land Use section should address:

- Degree of consistency between transportation strategies and land use policies;
- Livable communities and smart growth strategies;
- Corridor preservation and land use strategies;
- Scenic highways / byway preservation;
- Land use and transportation design and strategies;
- Sustainable development;
- Corridor conversions, i.e. rails to trails, canals to trails, utility rights of ways to trails, etc.

When local land use decision-makers pursue community design strategies that reduce vehicle miles of travel (VMT), RTPAs should consider ways to represent these effects on travel activity, either within transportation models or off models. This will assist RTP conformity assessments and aid future air quality planning.

E. The Interregional Connection Strategies section should address:

- Coordination with Caltrans' system planning efforts and statewide planning efforts (ITSP, CTP);
- Intercity rail and intercity bus;
- Goods Movement including highway, air travel, maritime, and rail modes;
- Cross-jurisdictional communication network;
- Five and 10 year Capital Improvement Plans for Aviation;
- Integration of interregional projects from other sources.

F. The New Technology section should address:

- Selection of ITS architecture and standards used in the region;
- Coordination with other ITS deployments with other regions;
- Evaluation of the cost/benefits of ITS deployment;
- Enhancement of mode choice or trip/non-trip (telecommuting, video conferencing) options to reduce travel.

Transportation Modal Strategies

The Action Element, whether organized by implementation strategies or by transportation mode should consider the following model sections:

A. The Highways section should address:

- National and state highway system, and regionally significant streets and roads;
- Corridor Preservation (i.e. Right of Way, historic highways, abandoned rails);
- Local maintenance and rehabilitation needs (including deferred maintenance);
- Maintenance of state highways;

- Surveillance, data collection and other infrastructure requirements for ITS;
- Unmet highway needs.

B. The Mass Transportation section (including regional transit services, and urban rail systems) should address:

- Implementation plan(s), operation strategies, and schedule for future service (including construction and procurement);
- Integration with transit, highway, street and road projects (including identification of priorities);
- Operational Integration between transit fleets and other modes (rail, aviation, taxis, etc.);
- Short and long-range transit plans and capital finance plans for the plan period;
- Fares, schedules, and maps;
- Unmet transit needs;
- Urban and commuter rail project priorities;
- Transit bus fuel strategy;
- Inventory of bus fleets by fuel type (including diesel, natural gas and other alternative fuels), and general fleet fuel strategies and;
- ITS elements to increase efficiency, safety and level of service.

C. The Nonmotorized section should address:

- Pedestrian programs and facilities;
- Pedestrian design guidelines for transportation facilities;
- Bicycle programs and facilities;
- Bicycle transportation plans including commuter bike trails;
- Transit interface with bicyclists and pedestrians;

- Unmet non-motorized needs;
- Nonmotorized enhancement activities.

D. The Rail Section should address relevant regional transportation planning issues related to:

- Urban Rail;
- Commuter Rail;
- Intercity Rail;
- Freight movement;
- Grade crossings and separations.

E. The Maritime Section should address, as appropriate:

- Port Access issues;
- Coastal Plans;
- State Maritime Policy;
- Seaport plans.

F. The Aviation Section should address:

- Ground access and required ground access plans (if the region includes a primary air-carrier airport, the RTP should include an Airport Ground Access Improvement Program as per Government Code 65081.1);
- Short and long-range capital improvement plan;
- Airport land use commissions;
- Aviation system plans;
- California Aviation System Plan;
- Unmet aviation needs;

G. The Aviation Section should address (continued)

- Airport system capacity.

H. The Goods Movement Section should address:

- Interface issues between highway, air travel, maritime, and rail;
- Ports, airports, and other gateways;
- Pass through movements;
- Border crossing issues (if applicable);
- New technology deployment [including Commercial Vehicle Operations (CVO)/ITS].

Financial Element Components

The Financial Element should include the following components:

1. A summary of the costs to operate and maintain the existing transportation system in the region, including the cumulative cost of deferred maintenance on the existing infrastructure;

2. Estimate of costs and a realistic projection of the revenues available for transportation system improvements recommended in the Action Element, by mode and by recipient agency. In doing so the Financial Element contains financial assumptions and projections that set parameters for the RTIP and ITIP such as:

    - Separately identified capital, rehabilitation and operational costs;
    - Costs and revenues of Transportation Demand Management actions;
    - Life-cycle costs as well as project benefits.

3. Inventory of existing and potential new transportation funding sources that can be used for transportation system improvements and that are appropriate for implementation by the recipient agency;

4. Financially constrained list of projects for which funding has been identified,or is reasonably expected to be available within the RTP planning horizons (short and long-term);

5. Financially unconstrained list of projects, which are both necessary and desirable, should funding become available. Federal transportation planning law allows a long-range transportation plan to include projects that do not have reasonably available funding (as long as new funding sources are proposed);

6. Potential funding shortfalls (and potential surpluses);

7. Alternative policy directions, and their timeframe, may involve development of new or revised procedures for allocating project funds;

Air Quality Documentation

Factors to be considered in the air quality documentation includes:

- The status of the RTP with respect to financial constraints, transportation conformity determinations, regionally significant projects and content requirements for the plan;
- The nonattainment or maintenance area designation for air pollutants;
- The status of the SIP or Federal Implementation Plan (FIP), concerning, if applicable, any control strategy SIP, TCMs and mobile source emissions budget;
- The documentation of general criteria and procedures followed in making conformity findings, including use of latest planning assumptions and emissions model, consultation and public involvement procedures, and lists of scheduled and delayed TCM implementation with action plans;
- Any special requirements for conformity analysis that apply to the region;
- Specific consultation with regional U.S. EPA, state and regional air quality agencies regarding concerns expressed and responses made, agreements with public and private entities and the public involvement process;
- A listing in categories, as specified in the checklist, of appropriate projects in the RTP;
- For urbanized nonattainment areas, the RTP should demonstrate its contribution to the achievement of California Clean Air Act transportation performance standards, (e.g., substantial reduction in the rate of increase in passenger vehicle trips and miles traveled per trip).